

REMARKS

Claims 1 and 2 are amended and claim 28 is added in this response. Claims 1-28 are pending in this application. Claims 3, 5-20 and 22-25 have been withdrawn from consideration by the Examiner. Favorable reconsideration and allowance of the application is respectfully requested.

Claim Rejections Under 35 USC § 112, second paragraph

Claims 4, 21, 26 and 27 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed.

The Examiner asserts that the feature of a plurality of utilization side heat exchangers including first and second adsorption heat exchangers as recited in claims 4, 21, 26 and 27 is unclear because an adsorption heat exchanger has already been claimed in claim 1. Also, the Examiner contends that the claims are unclear as to whether the previously claimed air heat exchanger has been excluded or included as a utilization side heat exchanger.

Claims 4, 21, 26 and 27 are clear as recited in view of claim 1. Claim 1 clearly recites “the plurality of utilization side heat exchangers **include at least one** adsorption heat exchanger” and claims 4 and 21 further claim that the plurality of utilization side heat exchangers include first and second adsorption heat exchangers.

Also, claims 4 and 21 as recited do not further exclude the previously claimed air heat exchanger. The transitional phrase “include” as recited in claims 4 and 21 is open-ended and does not exclude other additional elements in the claims.

Thus, claims 4, 21, 26 and 27 as recited are definite and clear. It is respectfully requested that this rejection be withdrawn.

Claim Rejections Under 35 USC § 103

Claims 1, 2, 4, 21, 26 and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jung, US 5,823,006 (hereinafter “Jung”) in view of Mathiprakasam, US 4,430,864 (hereinafter “Mathiprakasam”). This rejection is respectfully traversed.

Independent claim 1 as amended recites, *inter alia*,

the air conditioning system supplies the air having passed through the at least one adsorption heat exchanger to the room to cope with latent heat load in the room and supplies the air having passed through the air heat exchanger to the room to cope with sensible heat load in the room.

With this arrangement, the present invention seeks to provide an air conditioning system which can cope with indoor sensible heat load and latent heat load while attaining a high coefficient of performance. Specifically, the indoor sensible heat load and latent heat load are addressed by an air heat exchanger and an adsorption heat exchanger, respectively.

Jung describes an air conditioning system including two indoor heat exchangers connecting to two outdoor heat exchangers, respectively. The system includes valves to enable either or both of the indoor heat exchangers to function as evaporators during a cooling mode, or to function as condensers during a heating mode. See Abstract and Figures 14 and 15.

However, Jung is not concerned with utilizing an adsorption heat exchanger to cope with latent head load in the room and an air heat exchanger to cope with sensible heat load in the room as claimed.

Mathiprakasam describes an air conditioning system for simultaneous removal of sensible and latent heats from the room return air using a pair of heat exchangers having a desiccant material thereon. One heat exchanger operates as an evaporator to effect cooling and drying of the room return air while the other heat exchanger acts as a condenser of the refrigerant and regenerates the desiccant material thereon. See Abstract and Figures 1-3.

Unlike the present invention, Mathiprakasam is not concerned with an air conditioning system which can cope with indoor sensible heat load and latent heat load while attaining a high coefficient of performance. Thus, similarly to Jung, Mathiprakasam does not disclose or suggest “the air conditioning system supplies the air having passed through the at least one adsorption heat exchanger to the room to cope with latent heat load in the room and supplies the air having

passed through the air heat exchanger to the room to cope with sensible heat load in the room” as claimed.

In view of the above amendments and remarks, it is respectfully submitted that Jung and Mathiprakasam, when taken alone or in combination (assuming they can be combined, which Applicants do not admit), do not make claim 1 unpatentable. As claims 2, 4, 21, 26, 27 and new claim 28 are dependent to claim 1, it is respectfully submitted that these claims are also patentable for at least the reasons discussed with respect to claim 1. Thus, it is further respectfully submitted that the rejection of claims 1, 2, 4, 21, 26 and 27 should be withdrawn.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Dennis P. Chen Reg. No. 61,767 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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